SPECTRUM SHARING COMMITTEE PROJECT ROADMAP

Approved by the Spectrum Sharing Committee Steering Group 10 August 2016





Committee Standards are Being Developed in Phases

Early Release

SAS to SAS and SAS to CBSD Protocols

Version 1.0.0

 Initial support for: GAA, Domain Proxy, ESC Operation, FSS Protection, Measurement Reporting and Inter-SAS Communications.

Version 2.0.0

 Enhancements to features in Version 1. Initial support for PAL/PPA and Propagation Modelling.

Version 3.0.0

Continued enhancements to previous versions.

Other phases will be added as required





Early Release Publication Timeline



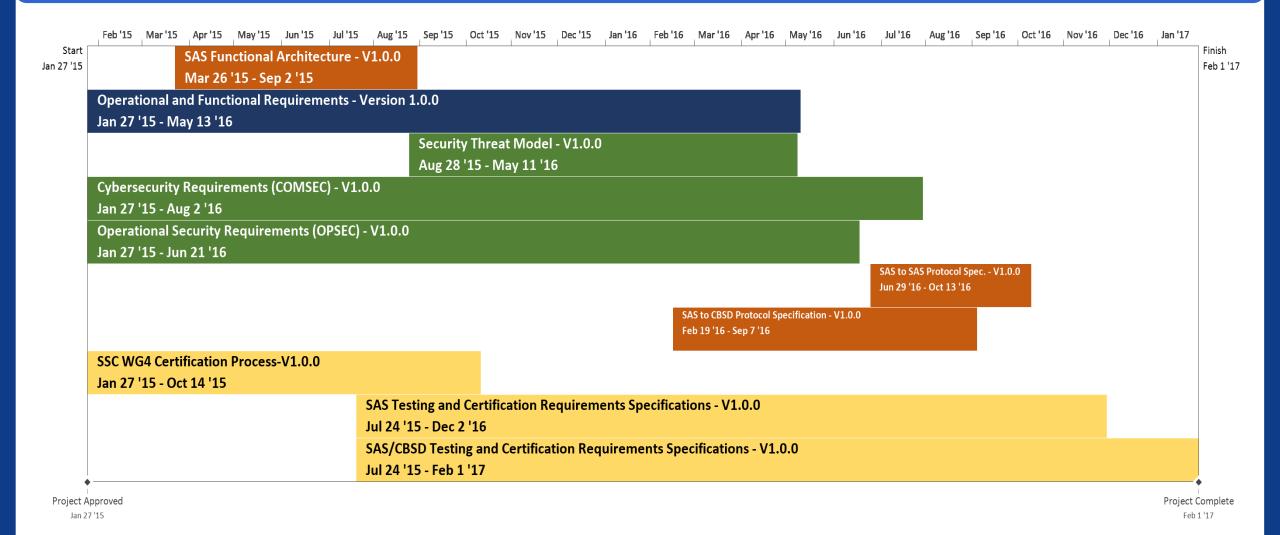
Notes

- TRA = Technical Report A, TRB = Technical Report B
- 2. Finish/publication dates include planned ballot period throughout this document





Version 1 Publication Timeline







What is addressed in the Version 1 Specifications

CBSD Measurement Reporting

 Initial requirements for CBSD measurements of their local interference environment, and reporting those data back to the SAS.

Communications Security

The communications security policies governing SAS and CBSD communications interfaces.

Domain Proxy

 The baseline Operational and Functional Requirements of the CBRS Domain Proxy for initial testing and trials.

Environmental Sensing Capability (ESC)

 The requirements for implementation of an Environment Sensing Capability, and protecting federal incumbents.

FSS Protection





What is addressed in the Version 1 Specifications (cont.)

Exception Management

• The requirements for how trouble tickets or exceptions are managed, including from FCC input, reports from incumbents, and reports from PAL.

Information Sharing

Initial support for SAS-SAS Synchronization and Information exchange.

Operations Security

 The overall system operational security requirements to include handling of incumbent data, obfuscation of spectrum data, and processes associated with auditing and governance of the SAS infrastructure.

Registration Processing

 The requirements for how a CBSD registers with a SAS, including owner registration, professional installer registration and CBSD registration.

Spectrum Grant Request Processing

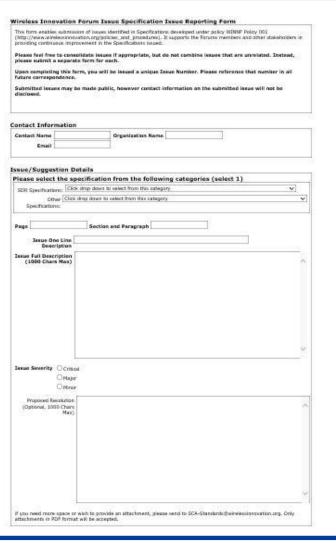
 The requirements for how a CBSD requests and relinquish grants, and how grants are reassigned or terminated.





Issue Management and Change Requests

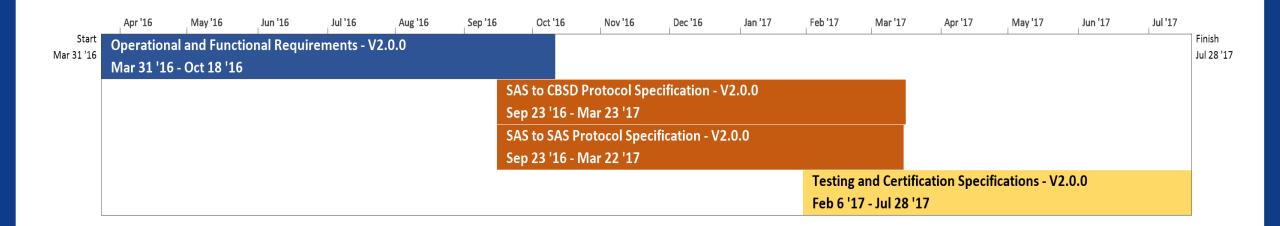
Following the release of revision 1 specifications, change requests will be collected from the Forum's public issues management portal







Version 2 Publication Timeline







What will be addressed in Version 2

Priority Access License

 Requirements on how PALs reports their coverage area to the SAS for end-to-end use of the licenses. This includes how PAL licensees define PAL Protection Areas (PPAs), request to operate in a particular geographic area within their license boundary (PPA), how PPA credentials and IDs are defined, conveyed and managed, and how the SAS accomplishes such protections.

Propagation Modeling

• Identify appropriate 3.5 GHz propagation models for Incumbent and PAL protection and PPA definition, determine relative benefits and limitations, develop agreement on baseline needs such as underlying data, and define standardized interference aggregation methodologies.

Full Support for FCC Rules

Enhancements from Version 1





What will be addressed in Version 3 (To Be Scheduled)

Channel Assignment

- Full support of requirements on how spectrum assignments are synchronized/assigned across SASs, including PAL.
- Requirements on how PAL channels will be assigned.

Coexistence

Define a framework for providing fair shared access to CBRS radio resources while
mitigating the negative impacts from multiple signals, possibly across multiple air
interface technologies, utilizing overlapping and/or neighboring radio resources.
 This can be used by other organizations in establishing technology specific
coexistence agreements.

Certified Professional Installer

 Guidelines for adoption of uniform industry working standards and curriculum required to be consistent with the protection of spectrum, both licensed and GAA, for sharing in the 3550-3700 MHz band.





Additional Items (To Be Scheduled)

Border area management

Requirements on Implementing international agreements to protect Canada and Mexico





Operationalizing the 3.5 GHz Shared Spectrum Ecosystem

The activities of the Operations Work Group will include:

- Defining the operational aspects for the FCC's Certification Tests of SAS, ESC, and CBSD elements
- Certification Authority (CA) Administration
- Partnering with other organizations to implement a Training and Certification process for CBSD Professional Installers (CPIs)
- Support development and administration of common databases for grandfathered Wireless Broadband Licensee system, FSS records, and Category B CBSD installation records
- Define process workflows for non-automated operational procedures.



